

Amendments to the Specification:

Please replace the third paragraph under DETAILED DESCRIPTION OF EXEMPLARY EMBODIMENTS on page 3 with the following amended paragraph:

Referring now to Figure 1 wherein is disclosed a partial cross-section view of a prior art gas expansion engine 100 of the piston type. Pressurized inlet gas 102 enters the engine 100 at inlet 110 through control valve 120 and is directed to the front or backside of double acting piston 130. Piston 130 is movable connected via connecting rod 140 to crank shaft 150. As piston 140 moves back and forth in the cylinder 132, so does the connecting rod 140 thereby acting upon the crank shaft 150 and producing rotation. Lower pressure gas 104, having converted to mechanical energy some of its potential energy from being at a higher-pressure inlet gas, is expelled through gas outlet 160. Reciprocating piston gas engines are well known in the art and may contain single or double acting pistons as well as single or multiple cylinders. Figure 2A is a schematic that illustrates how a piston type gas expansion engine converts pressure drop from the inlet gas, in the piston cylinder, into power by driving a piston attached to a rotatable shaft. Figure 2B is a schematic that illustrates how a conventional turbo expander ("turbine engine") 200 converts pressure drop in the inlet gas 202 flowing through the turbine vanes ~~260~~ 265 into mechanical energy through a rotatable shaft 270 attached to the turbine blades. Turbo expander engines are well known in the art. Pressurized inlet gas 202 enters inlet 210, passes through vanes 265 converting some of its potential energy to mechanical energy, is expelled as lower pressure gas 204 through gas outlet 260.

Please replace the fourth paragraph under DETAILED DESCRIPTION OF EXEMPLARY EMBODIMENTS on pages 3-4 with the following amended paragraph:

Applications of the present invention may be initially divided into two groups: open systems and closed systems. Figure 3 illustrates an example of an open system. Such a system might be located at a natural gas regulation station, where natural gas comes in from a high pressure pipeline 300 and ~~exists~~ exits to a lower pressure distribution network 310. Mechanical energy is recovered from the potential energy of the inlet by the gas expansion engine and can be

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used to drive a mechanical device and/or an electrical generator; the cooling effect of the pressure drop may be used for air conditioning, process cooling or some other form of chilling or cooling.